



June 24, 2016

RDC/John Poe Architects
116 East Third Street
Dayton, Ohio 45402

Attn: Mr. Tom Hesse, AIA

Re: Limited Asbestos Sampling Report
Hampton Veteran's Affairs Medical Center
100 Emancipation Drive
Hampton, Virginia
Terracon Project No.: 70167296

Dear Mr. Hesse:

The purpose of this report is to present the results of the limited asbestos survey performed on June 15, 2016 for RDC/John Poe Architects (Client) at the above referenced area located on the campus of Hampton Veteran's Affairs Medical Center in Hampton, Virginia. This survey was conducted in general accordance with Terracon Proposal No. P70167296 dated June 7, 2016. We understand that these services were requested due to the planned suspect wall material disturbance and proposed work in the crawl space where it has been brought into question about potential asbestos presence/contamination. Our survey activities were limited to the specific areas as detailed to Terracon by site representatives.

Asbestos was identified during the course of our limited survey. Please refer to the attached report for details.

Terracon appreciates the opportunity to provide this service to RDC/John Poe Architects. If you have any questions regarding this report, please contact the undersigned at 919.873.2211.

Sincerely,

Terracon Consultants Inc.

For:

Michael Penny, EI
Project Environmental Engineer

Scott D. Rohlf, CIH
Authorized Project Reviewer



LIMITED ASBESTOS SAMPLING REPORT

Hampton Veteran's Affairs Medical Center

100 Emancipation Drive

Hampton, Virginia

June 24, 2016

Terracon Project 70167296



Prepared For:

RDC/John Poe Architects

Dayton, Ohio

Prepared By:

Terracon Consultants, Inc.

Raleigh, North Carolina

Offices Nationwide
Employee-Owned

Established in 1965
terracon.com

Terracon

Geotechnical ■ Environmental ■ Construction Materials ■ Facilities

TABLE OF CONTENTS

	Page No.
1.0 INTRODUCTION	1
1.1 PROJECT OBJECTIVE	1
2.0 BUILDING DESCRIPTION	1
3.0 FIELD ACTIVITIES	2
3.1 VISUAL ASSESSMENT	2
3.2 PHYSICAL ASSESSMENT	2
3.3 SAMPLE COLLECTION	2
3.4 SAMPLE ANALYSIS	3
4.0 REGULATORY OVERVIEW	3
5.0 FINDINGS AND RECOMMENDATIONS	4
6.0 GENERAL COMMENTS	5
Appendix A Asbestos Survey Sample Summary	
Appendix B Identified Asbestos-Containing Materials	
Appendix C Asbestos Analytical Laboratory Data	
Appendix D General Crawl Space Sample Location Diagram	

LIMITED ASBESTOS SAMPLING REPORT

HAMPTON VETERAN'S AFFAIRS MEDICAL CENTER
100 EMANCIPATION DRIVE
HAMPTON, VIRGINIA

TERRACON PROJECT NO. 70167296

1.0 INTRODUCTION

Terracon conducted asbestos sampling of client-selected areas of the crawl space and patient rooms located on the campus of Hampton Veteran's Affairs Medical Center in Hampton, Virginia. This limited survey was conducted on June 15, 2016 by a Commonwealth of Virginia Accredited Asbestos Building Inspectors in general accordance with Terracon Proposal No. P70167296 dated June 7, 2016.

The select areas were surveyed and homogeneous areas of suspect asbestos-containing materials (ACM) were visually identified and documented. Although reasonable effort was made to survey accessible suspect materials, additional suspect but un-sampled materials could be located in voids or in other concealed areas. Suspect ACM samples were collected in general accordance with the sampling protocols outlined in EPA regulation 40 CFR 763 (Asbestos Hazard Emergency Response Act, AHERA). Samples were delivered to an accredited laboratory for analysis by Polarized Light Microscopy.

1.1 Project Objective

We understand this limited asbestos sampling was requested due to the planned suspect wall material disturbance and proposed work in the crawl space. We understand the purpose of these services is to identify and quantify ACM present prior to renovation activities and work in the crawl space. EPA regulation 40 CFR 61, Subpart M, National Emission Standards for Hazardous Air Pollutants (NESHAP), prohibits the release of asbestos fibers to the atmosphere during renovation or demolition activities. The asbestos NESHAP requires that potentially regulated asbestos-containing building materials be identified, classified and quantified prior to planned disturbances, renovation or demolition activities.

2.0 BUILDING DESCRIPTION

Building 137 – Eastern Unoccupied Patient Rooms

The site structure is a partially occupied medical building. However, the client provided scope of work was limited to walls located on two unoccupied wings on the east side of the building. The walls were finished with plaster over foam insulation board. Terracon did not assess other portions of the building.

Building 137 – Crawl Space

Terracon assessed the crawl space areas below the two eastern wings of the building. This totaled approximately 4,000 square feet of dirt floor crawl space. The crawl space walls consisted of concrete. Construction debris (floor tiles, insulation, concrete, wood) was observed throughout the crawl space areas.

3.0 FIELD ACTIVITIES

The limited survey was conducted by Commonwealth of Virginia Accredited Asbestos Building Inspectors Mr. Michael Penny and Ms. Alicia Coley (VA Accredited Asbestos Inspector Numbers 3303004009 and 3303003481, respectively). The survey was conducted in general accordance with the sample collection protocols established in EPA regulation 40 CFR 763, the Asbestos Hazard Emergency Response Act (AHERA). A summary of survey activities is provided below.

3.1 Visual Assessment

Our survey activities began with a visual observation of the work areas to identify homogeneous areas of suspect ACM. A homogeneous area consists of building materials that appear similar throughout in terms of color, texture and date of application. At the request of the Client, only select suspect wall materials were sampled, and only a select portion of the crawl space was assessed. Building materials identified as concrete, glass, wood, masonry, metal or rubber were not considered suspect. The survey was limited to readily and safely accessible areas of the proposed renovation area.

3.2 Physical Assessment

A physical assessment of each homogeneous area of suspect ACM was conducted to assess the friability and condition of the materials. A friable material is defined by the EPA as a material, which can be crumbled, pulverized or reduced to powder by hand pressure when dry. Friability was assessed by physically touching suspect materials.

3.3 Sample Collection

Based on results of the visual observation, bulk samples of suspect ACM were collected in general accordance with AHERA sampling protocols. Random samples of suspect materials were collected in each homogeneous area. The inspectors collected bulk samples using wet methods as applicable to reduce the potential for fiber release. Samples were placed in sealable containers and labeled with unique sample numbers using an indelible marker.

Building 137 – Eastern Unoccupied Patient Rooms

Eight (8) bulk samples were collected from one homogeneous area of suspect ACM from the vacant patient room walls.

Building 137 – Crawl Space

Terracon separated the two subject crawl space area into two 16-section grids and collected one surface soil sample from each area within those grids. Terracon collected a total of 32 samples of soil and debris from the crawl space.

A summary of suspect ACM samples collected during the survey is included as Appendix A.

3.4 Sample Analysis

Bulk samples were submitted under chain of custody to EMSL Analytical, Inc. (EMSL) of Morrisville, North Carolina for analysis by Polarized Light Microscopy (PLM) with dispersion staining techniques per EPA methodology (40 CFR 763, Subpart F). The percentage of asbestos, where applicable, was determined by microscopic visual estimation. EMSL is accredited under the National Voluntary Laboratory Accreditation Program NVLAP (Accreditation Number 200671-0).

4.0 REGULATORY OVERVIEW

The asbestos NESHAP (40 CFR Part 61, Subpart M) regulates asbestos fiber emissions and asbestos waste disposal practices. It also requires the identification and classification of existing building materials prior to demolition or renovation activity. Under NESHAP, asbestos-containing building materials are classified as either friable, Category I non-friable or Category II non-friable ACM. Friable materials are those that, when dry, may be crumbled, pulverized or reduced to powder by hand pressure. Category I non-friable ACM includes packings, gaskets, resilient floor coverings and asphalt roofing products containing more than 1% asbestos. Category II non-friable ACM are any materials other than Category I materials that contain more than 1% asbestos.

In the state of Virginia, the Virginia Department of Labor and Industry (DOLI) regulates asbestos abatement and removal through Virginia Occupational Safety and Health (VOSH) regulations, Environmental Protection Agency's National Emission Standards for Hazardous Air Pollutants (NESHAP), and enforcement of the Asbestos Notification regulations found in the Labor Laws of Virginia (§40.1-51.20). The DOLI requires that any asbestos-related activity conducted in a public building be performed by personnel accredited by the Commonwealth of Virginia Department of Professional and Occupational Regulation (DPOR).

Written notification to DOLI of renovation or demolition activities is required only if asbestos is present and the amount to be disturbed is greater than 10 linear feet or 10 square feet. If non-friable asbestos-containing material, roofing, flooring and siding materials are in good condition and when installed, encapsulated or removed do not become friable, a notification is not required. If the ACM is not in good condition or ACM removal will be conducted using mechanical means, notification is required. The asbestos abatement contractor or facility

owner must submit an Asbestos Notification of Demolition and Renovation form to the DOLI along with the appropriate fees within at least 20 calendar days prior to the scheduled asbestos removal activity or demolition start date by certified mail or hand delivery.

The EPA requires that no person remove more than 35 cubic feet (1 cubic meter), 160 square feet (15 square meters), or 260 linear feet (80 linear meters) of regulated asbestos-containing material without a permit issued by the EPA. Applications must be postmarked or received by the EPA at least 10 working days prior to the scheduled removal start date. The application, must be mailed to the following address:

- Asbestos Coordinator
USEPA
Region III
Mail Code 3LC62
1650 Arch St.
Philadelphia, PA 19103-2029

Virginia Occupational Safety and Health (VOSH) regulations govern workplace exposure to asbestos. The VOSH Asbestos standard requires employee exposure to airborne asbestos fibers be maintained at or below 0.1 asbestos fibers per cubic centimeter of air (0.1 f/cc). The VOSH Asbestos standard classifies construction and maintenance activities, which could disturb ACM and specifies work practices and precautions, which employers must follow when engaging in each class of regulated work. This standard also sets forth communication of hazard requirements for building owners, including requirements for posting areas of known or presumed ACM (PACM). The standard requires building owners and lessees who control the management and recordkeeping functions of a building to maintain information regarding the presence, location and quantity of ACM and PACM for the duration of ownership or lease. The information must be transferred to successive building owners and to employers whose employees may be exposed to asbestos, including tenants who will occupy areas containing ACM or PACM.

5.0 FINDINGS AND RECOMMENDATIONS

Based on the results of laboratory analysis, asbestos was identified in 3 of the 32 samples of the following material:

- Soil (crawl space)

Appendix D includes a general location diagram of areas identified to contain asbestos. Employees working in these areas and surrounding areas should be at least OSHA Class III workers and should wear proper respiratory and clothing protection.

Laboratory analytical reports are included in Appendix C. It is possible that additional suspect material be located in concealed areas such as wall cavities or in depths of soil beyond this scope. If additional suspect materials is found during renovation activities, they should be assumed to contain asbestos until laboratory analysis can confirm or deny their asbestos content.

6.0 GENERAL COMMENTS

This limited asbestos sampling was conducted in a manner consistent with the level of care and skill ordinarily exercised by members of the profession currently practicing under similar conditions in the same locale. The results, findings, conclusions and recommendations expressed in this report are based on conditions observed during our survey of the building. The information contained in this report is relevant to the date on which this survey was performed, and should not be relied upon to represent conditions at a later date. This report has been prepared on behalf of and exclusively for use by RDC/John Poe Architects for specific application to their project as discussed. This report is not a bidding document. Contractors or consultants reviewing this report must draw their own conclusions regarding further investigation or remediation deemed necessary. Terracon does not warrant the work of regulatory agencies, laboratories or other third parties supplying information, which may have been used in the preparation of this report. No warranty, expressed or implied is made.

APPENDIX A

ASBESTOS SURVEY SAMPLE SUMMARY

Appendix A

ASBESTOS SURVEY SAMPLE SUMMARY

Hampton Veteran Affairs Building 137
100 Emancipation Drive
Hampton, Virginia

HA	Sample No.	Description	Sample Location	Lab Results
1	HVA-1	Plaster with black felt paper and gray mastic on blue foam	Wall adjacent to new building on CMU	None Detected
1	HVA-2	Plaster with black felt paper and gray mastic on blue foam	Wall adjacent to new building on CMU	None Detected
1	HVA-3	Plaster with black felt paper and gray mastic on blue foam	Wall adjacent to new building on CMU	None Detected
1	HVA-4	Plaster with black felt paper and gray mastic on blue foam	Wall adjacent to new building on CMU	None Detected
1	HVA-5	Plaster with black felt paper and gray mastic on blue foam	Wall adjacent to new building on CMU	None Detected
1	HVA-6	Plaster with black felt paper and gray mastic on blue foam	Wall adjacent to new building on CMU	None Detected
1	HVA-7	Plaster with black felt paper and gray mastic on blue foam	Wall adjacent to new building on CMU	None Detected
1	HVA-8	Plaster with black felt paper and gray mastic on blue foam	Wall adjacent to new building on CMU	None Detected
2	A1	Soil and debris	North-East Wing Crawl Space	None Detected
3	A2	Soil and debris	North-East Wing Crawl Space	None Detected
4	A3	Soil and debris	North-East Wing Crawl Space	None Detected
5	A4	Soil and debris	North-East Wing Crawl Space	None Detected
6	B1	Soil and debris	North-East Wing Crawl Space	None Detected
7	B2	Soil and debris	North-East Wing Crawl Space	None Detected
8	B3	Soil and debris	North-East Wing Crawl Space	None Detected
9	B4	Soil and debris	North-East Wing Crawl Space	None Detected
10	C1	Soil and debris	North-East Wing Crawl Space	None Detected
11	C2	Soil and debris	North-East Wing Crawl Space	None Detected
12	C3	Soil and debris	North-East Wing Crawl Space	None Detected
13	C4	Soil and debris	North-East Wing Crawl Space	Chrysotile
14	D1	Soil and debris	North-East Wing Crawl Space	None Detected
15	D2	Soil and debris	North-East Wing Crawl Space	None Detected
16	D3	Soil and debris	North-East Wing Crawl Space	Chrysotile
17	D4	Soil and debris	North-East Wing Crawl Space	None Detected
18	E1	Soil and debris	South-East Wing Crawl Space	None Detected
19	E2	Soil and debris	South-East Wing Crawl Space	Chrysotile
20	E3	Soil and debris	South-East Wing Crawl Space	None Detected
21	E4	Soil and debris	South-East Wing Crawl Space	None Detected
22	F1	Soil and debris	South-East Wing Crawl Space	None Detected
23	F2	Soil and debris	South-East Wing Crawl Space	None Detected
24	F3	Soil and debris	South-East Wing Crawl Space	None Detected
25	F4	Soil and debris	South-East Wing Crawl Space	None Detected
26	G1	Soil and debris	South-East Wing Crawl Space	None Detected
27	G2	Soil and debris	South-East Wing Crawl Space	None Detected
28	G3	Soil and debris	South-East Wing Crawl Space	None Detected
29	G4	Soil and debris	South-East Wing Crawl Space	None Detected
30	H1	Soil and debris	South-East Wing Crawl Space	None Detected
31	H2	Soil and debris	South-East Wing Crawl Space	None Detected
32	H3	Soil and debris	South-East Wing Crawl Space	None Detected
33	H4	Soil and debris	South-East Wing Crawl Space	None Detected

Results in bold indicate asbestos-containing materials.

*Analyzed by a qualitative PLM analysis; asbestos quantities are not provided

APPENDIX B

IDENTIFIED ASBESTOS-CONTAINING MATERIALS

Appendix B

IDENTIFIED ASBESTOS-CONTAINING MATERIALS

Hampton Veteran Affairs Building 137
100 Emancipation Drive
Hampton, Virginia

HA	Sample No.	Description	Material Location	NESHAP Classification	Type Asbestos	Condition	Estimated Quantity*
13	C4	Soil and Debris	North-East Wing Crawl Space	N/A	Chrysotile	Damaged	Approximately 100 square feet
16	D3	Soil and Debris	North-East Wing Crawl Space	N/A	Chrysotile	Damaged	Approximately 100 square feet
19	E2	Soil and Debris	South-East Wing Crawl Space	N/A	Chrysotile	Damaged	Approximately 100 square feet

Note: All quantities should be verified by the asbestos abatement contractor.

APPENDIX C

ASBESTOS LABORATORY ANALYTICAL REPORT

**EMSL Analytical, Inc.**

2500 Gateway Centre Blvd., Suite 600, Morrisville, NC 27560

Phone/Fax: (919) 465-3900 / (919) 465-3950

<http://www.EMSL.com>raleighlab@emsl.com

EMSL Order: 291603935

CustomerID: TITA51

CustomerPO:

ProjectID:

Attn: **Michael Penny**
Terracon Consultants, Inc.
2401 Brentwood Road
Suite 107
Raleigh, NC 27604

Phone: (919) 873-2211
 Fax: (919) 873-9555
 Received: 06/16/16 1:00 PM
 Analysis Date: 6/20/2016
 Collected: 6/15/2016

Project: 70167296

Test Report: Qualitative asbestos analysis of soils using the EPA 600/R-93/116 method

Sample	Description	Appearance	Result	Notes
A1 291603935-0009	North Crawl Space, Soil/Debris	Brown Fibrous Homogeneous	None Detected	
A2 291603935-0010	North Crawl Space, Soil/Debris	Brown Fibrous Homogeneous	None Detected	
A3 291603935-0011	North Crawl Space, Soil/Debris	Brown Fibrous Homogeneous	None Detected	
A4 291603935-0012	North Crawl Space, Soil/Debris	Brown Fibrous Homogeneous	None Detected	
B1 291603935-0013	North Crawl Space, Soil/Debris	Brown Fibrous Homogeneous	None Detected	
B2 291603935-0014	North Crawl Space, Soil/Debris	Brown Fibrous Homogeneous	None Detected	
B3 291603935-0015	North Crawl Space, Soil/Debris	Brown Fibrous Homogeneous	None Detected	
B4 291603935-0016	North Crawl Space, Soil/Debris	Brown Fibrous Homogeneous	None Detected	
C1 291603935-0017	North Crawl Space, Soil/Debris	Brown Fibrous Homogeneous	None Detected	

Analyst(s)

Billy Barnes (5)

Roxsee Stover (19)

Joshua Moorman (8)

Billy Barnes, Asbestos Lab Manager
or other approved signatory

Soil is a problem matrix due to its inherent heterogeneity and there is a likelihood for false negatives with this analysis. EMSL recommends more specialized methodologies such as the EPA 600/R-93/116 with milling preparation. EMSL maintains liability limited to cost of analysis. This report relates only to the samples reported above and may not be reproduced, except in full, without written approval by EMSL. EMSL bears no responsibility for sample collection activities or analytical method limitations. Interpretation and use of test results are the responsibility of the client. Samples received in good condition unless otherwise noted.

Samples analyzed by EMSL Analytical, Inc. Morrisville, NC

Initial report from 06/20/2016 14:16:43



EMSL Analytical, Inc.

2500 Gateway Centre Blvd., Suite 600, Morrisville, NC 27560

Phone/Fax: (919) 465-3900 / (919) 465-3950

<http://www.EMSL.com>

raleighlab@emsl.com

EMSL Order: 291603935

CustomerID: TITA51

CustomerPO:

ProjectID:

Attn: **Michael Penny**
Terracon Consultants, Inc.
2401 Brentwood Road
Suite 107
Raleigh, NC 27604

Phone: (919) 873-2211
Fax: (919) 873-9555
Received: 06/16/16 1:00 PM
Analysis Date: 6/20/2016
Collected: 6/15/2016

Project: 70167296

Test Report: Qualitative asbestos analysis of soils using the EPA 600/R-93/116 method

Sample	Description	Appearance	Result	Notes
C2 291603935-0018	North Crawl Space, Soil/Debris	Brown Fibrous Homogeneous	None Detected	
C3 291603935-0019	North Crawl Space, Soil/Debris	Brown/Gray Fibrous Homogeneous	None Detected	
C4 291603935-0020	North Crawl Space, Soil/Debris	Gray/White Non-Fibrous Homogeneous	Chrysotile	
D1 291603935-0021	North Crawl Space, Soil/Debris	Brown/Black Fibrous Homogeneous	None Detected	
D2 291603935-0022	North Crawl Space, Soil/Debris	Various Fibrous Homogeneous	None Detected	
D3 291603935-0023	North Crawl Space, Soil/Debris	Various Fibrous Homogeneous	Chrysotile	
D4 291603935-0024	North Crawl Space, Soil/Debris	Brown/Tan/Black Fibrous Homogeneous	None Detected	
E1 291603935-0025	South Crawl Space, Soil/Debris	Various Fibrous Homogeneous	None Detected	
E2 291603935-0026	South Crawl Space, Soil/Debris	Brown Fibrous Homogeneous	Chrysotile	

Analyst(s)

Billy Barnes (5)

Roxsee Stover (19)

Joshua Moorman (8)

Billy Barnes, Asbestos Lab Manager
or other approved signatory

Soil is a problem matrix due to its inherent heterogeneity and there is a likelihood for false negatives with this analysis. EMSL recommends more specialized methodologies such as the EPA 600/R-93/116 with milling preparation. EMSL maintains liability limited to cost of analysis. This report relates only to the samples reported above and may not be reproduced, except in full, without written approval by EMSL. EMSL bears no responsibility for sample collection activities or analytical method limitations. Interpretation and use of test results are the responsibility of the client. Samples received in good condition unless otherwise noted.

Samples analyzed by EMSL Analytical, Inc. Morrisville, NC

Initial report from 06/20/2016 14:16:43

**EMSL Analytical, Inc.**

2500 Gateway Centre Blvd., Suite 600, Morrisville, NC 27560

Phone/Fax: (919) 465-3900 / (919) 465-3950

<http://www.EMSL.com>raleighlab@emsl.com

EMSL Order: 291603935

CustomerID: TITA51

CustomerPO:

ProjectID:

Attn: **Michael Penny**
Terracon Consultants, Inc.
2401 Brentwood Road
Suite 107
Raleigh, NC 27604

Phone: (919) 873-2211
 Fax: (919) 873-9555
 Received: 06/16/16 1:00 PM
 Analysis Date: 6/20/2016
 Collected: 6/15/2016

Project: 70167296

Test Report: Qualitative asbestos analysis of soils using the EPA 600/R-93/116 method

Sample	Description	Appearance	Result	Notes
E3 291603935-0027	South Crawl Space, Soil/Debris	Brown Fibrous Homogeneous	None Detected	
E4 291603935-0028	South Crawl Space, Soil/Debris	Brown/Tan/Black Fibrous Homogeneous	None Detected	
F1 291603935-0029	South Crawl Space, Soil/Debris	Brown Fibrous Homogeneous	None Detected	
F2 291603935-0030	South Crawl Space, Soil/Debris	Brown/Tan Fibrous Homogeneous	None Detected	
F3 291603935-0031	South Crawl Space, Soil/Debris	Brown Fibrous Homogeneous	None Detected	
F4 291603935-0032	South Crawl Space, Soil/Debris	Brown Fibrous Homogeneous	None Detected	
G1 291603935-0033	South Crawl Space, Soil/Debris	Brown Fibrous Homogeneous	None Detected	
G2 291603935-0034	South Crawl Space, Soil/Debris	Brown Fibrous Homogeneous	None Detected	
G3 291603935-0035	South Crawl Space, Soil/Debris	Brown Fibrous Homogeneous	None Detected	

Analyst(s)

*Billy Barnes (5)**Roxsee Stover (19)**Joshua Moorman (8)*

Billy Barnes, Asbestos Lab Manager
 or other approved signatory

Soil is a problem matrix due to its inherent heterogeneity and there is a likelihood for false negatives with this analysis. EMSL recommends more specialized methodologies such as the EPA 600/R-93/116 with milling preparation. EMSL maintains liability limited to cost of analysis. This report relates only to the samples reported above and may not be reproduced, except in full, without written approval by EMSL. EMSL bears no responsibility for sample collection activities or analytical method limitations. Interpretation and use of test results are the responsibility of the client. Samples received in good condition unless otherwise noted.

Samples analyzed by EMSL Analytical, Inc. Morrisville, NC

Initial report from 06/20/2016 14:16:43

**EMSL Analytical, Inc.**

2500 Gateway Centre Blvd., Suite 600, Morrisville, NC 27560

Phone/Fax: (919) 465-3900 / (919) 465-3950

<http://www.EMSL.com>raleighlab@emsl.com

EMSL Order: 291603935

CustomerID: TITA51

CustomerPO:

ProjectID:

Attn: **Michael Penny**
Terracon Consultants, Inc.
2401 Brentwood Road
Suite 107
Raleigh, NC 27604

Phone: (919) 873-2211
 Fax: (919) 873-9555
 Received: 06/16/16 1:00 PM
 Analysis Date: 6/20/2016
 Collected: 6/15/2016

Project: 70167296

Test Report: Qualitative asbestos analysis of soils using the EPA 600/R-93/116 method

Sample	Description	Appearance	Result	Notes
G4 291603935-0036	South Crawl Space, Soil/Debris	Brown Fibrous Homogeneous	None Detected	
H1 291603935-0037	South Crawl Space, Soil/Debris	Brown Fibrous Homogeneous	None Detected	
H2 291603935-0038	South Crawl Space, Soil/Debris	Brown/Tan Fibrous Homogeneous	None Detected	
H3 291603935-0039	South Crawl Space, Soil/Debris	Brown Fibrous Homogeneous	None Detected	
H4 291603935-0040	South Crawl Space, Soil/Debris	Brown Fibrous Homogeneous	None Detected	

Vermiculite and Soil are known problem matrices and negative results cannot be guaranteed. Additional analysis such as CARB 435 milling prep or ASTM Draft Soil Sieving is recommended for proper quantification of asbestos in vermiculite and soil.

Analyst(s)

*Billy Barnes (5)**Roxsee Stover (19)**Joshua Moorman (8)*

Billy Barnes, Asbestos Lab Manager
 or other approved signatory

Soil is a problem matrix due to its inherent heterogeneity and there is a likelihood for false negatives with this analysis. EMSL recommends more specialized methodologies such as the EPA 600/R-93/116 with milling preparation. EMSL maintains liability limited to cost of analysis. This report relates only to the samples reported above and may not be reproduced, except in full, without written approval by EMSL. EMSL bears no responsibility for sample collection activities or analytical method limitations. Interpretation and use of test results are the responsibility of the client. Samples received in good condition unless otherwise noted.

Samples analyzed by EMSL Analytical, Inc. Morrisville, NC

Initial report from 06/20/2016 14:16:43



EMSL Analytical, Inc.

2500 Gateway Centre Blvd., Suite 600 Morrisville, NC 27560
Tel/Fax: (919) 465-3900 / (919) 465-3950
<http://www.EMSL.com> / raleighlab@emsl.com

EMSL Order: 291603935
Customer ID: TITA51
Customer PO:
Project ID:

Attention: Michael Penny
Terracon Consultants, Inc.
2401 Brentwood Road
Suite 107
Raleigh, NC 27604
Project: 70167296

Phone: (919) 873-2211
Fax: (919) 873-9555
Received Date: 06/16/2016 1:00 PM
Analysis Date: 06/17/2016
Collected Date: 06/15/2016

Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
HVA-1-Skim Coat <i>291603935-0001</i>	Wall Adjacent to New Bldg on CMU - Plaster w/ Black Felt Paper & Gray Mastic on Blue Foam	White Fibrous Homogeneous	2% Cellulose	98% Non-fibrous (Other)	None Detected
HVA-1-Base Coat <i>291603935-0001A</i>	Wall Adjacent to New Bldg on CMU - Plaster w/ Black Felt Paper & Gray Mastic on Blue Foam	Gray Fibrous Homogeneous	2% Cellulose <1% Glass	98% Non-fibrous (Other)	None Detected
HVA-1-Felt Paper <i>291603935-0001B</i>	Wall Adjacent to New Bldg on CMU - Plaster w/ Black Felt Paper & Gray Mastic on Blue Foam	Black Fibrous Homogeneous	12% Cellulose 12% Synthetic	76% Non-fibrous (Other)	None Detected
HVA-1-Mastic <i>291603935-0001C</i>	Wall Adjacent to New Bldg on CMU - Plaster w/ Black Felt Paper & Gray Mastic on Blue Foam	Gray Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
<i>Inseparable foam.</i>					
HVA-2-Skim Coat <i>291603935-0002</i>	Wall Adjacent to New Bldg on CMU - Plaster w/ Black Felt Paper & Gray Mastic on Blue Foam	White Fibrous Homogeneous	2% Cellulose	98% Non-fibrous (Other)	None Detected
HVA-2-Base Coat <i>291603935-0002A</i>	Wall Adjacent to New Bldg on CMU - Plaster w/ Black Felt Paper & Gray Mastic on Blue Foam	Gray Non-Fibrous Homogeneous	<1% Cellulose <1% Glass	100% Non-fibrous (Other)	None Detected
HVA-2-Felt Paper <i>291603935-0002B</i>	Wall Adjacent to New Bldg on CMU - Plaster w/ Black Felt Paper & Gray Mastic on Blue Foam	Black Fibrous Homogeneous	10% Cellulose 12% Synthetic	78% Non-fibrous (Other)	None Detected
HVA-2-Mastic <i>291603935-0002C</i>	Wall Adjacent to New Bldg on CMU - Plaster w/ Black Felt Paper & Gray Mastic on Blue Foam	Gray Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
<i>Inseparable foam.</i>					
HVA-3-Skim Coat <i>291603935-0003</i>	Wall Adjacent to New Bldg on CMU - Plaster w/ Black Felt Paper & Gray Mastic on Blue Foam	White Non-Fibrous Homogeneous	<1% Cellulose	100% Non-fibrous (Other)	None Detected

Initial report from: 06/20/2016 14:16:43



EMSL Analytical, Inc.

2500 Gateway Centre Blvd., Suite 600 Morrisville, NC 27560

Tel/Fax: (919) 465-3900 / (919) 465-3950

<http://www.EMSL.com> / raleighlab@emsl.com

EMSL Order: 291603935

Customer ID: TITA51

Customer PO:

Project ID:

Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
HVA-3-Base Coat 291603935-0003A	Wall Adjacent to New Bldg on CMU - Plaster w/ Black Felt Paper & Gray Mastic on Blue Foam	Gray Non-Fibrous Homogeneous	<1% Cellulose	100% Non-fibrous (Other)	None Detected
HVA-3-Felt Paper 291603935-0003B	Wall Adjacent to New Bldg on CMU - Plaster w/ Black Felt Paper & Gray Mastic on Blue Foam	Black Fibrous Homogeneous	12% Cellulose 12% Synthetic	76% Non-fibrous (Other)	None Detected
HVA-3-Mastic 291603935-0003C	Wall Adjacent to New Bldg on CMU - Plaster w/ Black Felt Paper & Gray Mastic on Blue Foam	Gray Non-Fibrous Homogeneous	<1% Cellulose	100% Non-fibrous (Other)	None Detected
<i>Inseparable foam.</i>					
HVA-4-Skim Coat 291603935-0004	Wall Adjacent to New Bldg on CMU - Plaster w/ Black Felt Paper & Gray Mastic on Blue Foam	White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
HVA-4-Base Coat 291603935-0004A	Wall Adjacent to New Bldg on CMU - Plaster w/ Black Felt Paper & Gray Mastic on Blue Foam	Gray Non-Fibrous Homogeneous	<1% Glass	100% Non-fibrous (Other)	None Detected
HVA-4-Felt Paper 291603935-0004B	Wall Adjacent to New Bldg on CMU - Plaster w/ Black Felt Paper & Gray Mastic on Blue Foam	Black Fibrous Homogeneous	10% Cellulose 10% Synthetic	80% Non-fibrous (Other)	None Detected
HVA-4-Mastic 291603935-0004C	Wall Adjacent to New Bldg on CMU - Plaster w/ Black Felt Paper & Gray Mastic on Blue Foam	Gray Non-Fibrous Homogeneous	<1% Cellulose	100% Non-fibrous (Other)	None Detected
HVA-5-Skim Coat 291603935-0005	Wall Adjacent to New Bldg on CMU - Plaster w/ Black Felt Paper & Gray Mastic on Blue Foam	White Fibrous Homogeneous	2% Cellulose	98% Non-fibrous (Other)	None Detected
HVA-5-Base Coat 291603935-0005A	Wall Adjacent to New Bldg on CMU - Plaster w/ Black Felt Paper & Gray Mastic on Blue Foam	Gray Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
HVA-5-Felt Paper 291603935-0005B	Wall Adjacent to New Bldg on CMU - Plaster w/ Black Felt Paper & Gray Mastic on Blue Foam	Black Fibrous Homogeneous	12% Cellulose 12% Synthetic	76% Non-fibrous (Other)	None Detected
HVA-5-Mastic 291603935-0005C	Wall Adjacent to New Bldg on CMU - Plaster w/ Black Felt Paper & Gray Mastic on Blue Foam	Gray Non-Fibrous Homogeneous	<1% Cellulose	100% Non-fibrous (Other)	None Detected



EMSL Analytical, Inc.

2500 Gateway Centre Blvd., Suite 600 Morrisville, NC 27560
Tel/Fax: (919) 465-3900 / (919) 465-3950
<http://www.EMSL.com> / raleighlab@emsl.com

EMSL Order: 291603935
Customer ID: TITA51
Customer PO:
Project ID:

Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
HVA-6-Skim Coat 291603935-0006	Wall Adjacent to New Bldg on CMU - Plaster w/ Black Felt Paper & Gray Mastic on Blue Foam	White Fibrous Homogeneous	2% Cellulose	98% Non-fibrous (Other)	None Detected
HVA-6-Base Coat 291603935-0006A	Wall Adjacent to New Bldg on CMU - Plaster w/ Black Felt Paper & Gray Mastic on Blue Foam	Gray Fibrous Homogeneous	2% Cellulose 2% Glass	96% Non-fibrous (Other)	None Detected
HVA-6-Felt Paper 291603935-0006B	Wall Adjacent to New Bldg on CMU - Plaster w/ Black Felt Paper & Gray Mastic on Blue Foam	Brown/Black Fibrous Homogeneous	60% Cellulose	40% Non-fibrous (Other)	None Detected
HVA-6-Mastic 291603935-0006C	Wall Adjacent to New Bldg on CMU - Plaster w/ Black Felt Paper & Gray Mastic on Blue Foam	Gray Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
HVA-7-Skim Coat 291603935-0007	Wall Adjacent to New Bldg on CMU - Plaster w/ Black Felt Paper & Gray Mastic on Blue Foam	White Fibrous Homogeneous	5% Cellulose	95% Non-fibrous (Other)	None Detected
HVA-7-Base Coat 291603935-0007A	Wall Adjacent to New Bldg on CMU - Plaster w/ Black Felt Paper & Gray Mastic on Blue Foam	Gray Fibrous Homogeneous	2% Cellulose	98% Non-fibrous (Other)	None Detected
HVA-7-Felt Paper 291603935-0007B	Wall Adjacent to New Bldg on CMU - Plaster w/ Black Felt Paper & Gray Mastic on Blue Foam	Brown/Black Fibrous Homogeneous	60% Cellulose	40% Non-fibrous (Other)	None Detected
HVA-7-Mastic 291603935-0007C	Wall Adjacent to New Bldg on CMU - Plaster w/ Black Felt Paper & Gray Mastic on Blue Foam	Gray Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
HVA-8-Skim Coat 291603935-0008	Wall Adjacent to New Bldg on CMU - Plaster w/ Black Felt Paper & Gray Mastic on Blue Foam	White Fibrous Homogeneous	2% Cellulose	98% Non-fibrous (Other)	None Detected
HVA-8-Base Coat 291603935-0008A	Wall Adjacent to New Bldg on CMU - Plaster w/ Black Felt Paper & Gray Mastic on Blue Foam	Gray Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
HVA-8-Felt Paper 291603935-0008B	Wall Adjacent to New Bldg on CMU - Plaster w/ Black Felt Paper & Gray Mastic on Blue Foam	Brown/Black Fibrous Homogeneous	60% Cellulose	40% Non-fibrous (Other)	None Detected
HVA-8-Mastic 291603935-0008C	Wall Adjacent to New Bldg on CMU - Plaster w/ Black Felt Paper & Gray Mastic on Blue Foam	Gray Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected

Initial report from: 06/20/2016 14:16:43



EMSL Analytical, Inc.

2500 Gateway Centre Blvd., Suite 600 Morrisville, NC 27560
Tel/Fax: (919) 465-3900 / (919) 465-3950
<http://www.EMSL.com> / raleighlab@emsl.com

EMSL Order: 291603935

Customer ID: TITA51

Customer PO:

Project ID:

Analyst(s)

Olivia Bradley (20)
Roxsee Stover (12)

Billy Barnes, Asbestos Lab Manager
or Other Approved Signatory

EMSL maintains liability limited to cost of analysis. This report relates only to the samples reported and may not be reproduced, except in full, without written approval by EMSL. EMSL bears no responsibility for sample collection activities or analytical method limitations. Interpretation and use of test results are the responsibility of the client. This report must not be used by the client to claim product certification, approval, or endorsement by NVLAP, NIST or any agency of the federal government. Non-friable organically bound materials present a problem matrix and therefore EMSL recommends gravimetric reduction prior to analysis. Samples received in good condition unless otherwise noted. Estimated accuracy, precision and uncertainty data available upon request. Unless requested by the client, building materials manufactured with multiple layers (i.e. linoleum, wallboard, etc.) are reported as a single sample. Reporting limit is 1%

Samples analyzed by EMSL Analytical, Inc. Morrisville, NC NVLAP Lab Code 200671-0, VA 3333 000278, WVA LT000296

Initial report from: 06/20/2016 14:16:43

Terracon Consultants, Inc.
70167296
6/16/2016 13:0
PLM

TAT: 72 Hour
Bulk

Order ID: 291603935
No Samples: 8
Due: 06/21 1:00 PM
Fax: 919-873-9555

EMSL ANALYTICAL, INC.
ROUTE 130 NORTH
AMINSON, NJ 08077
NE: (800) 220-3675
AX: (856) 786-5974

Company: TERRACON		EMSL-Bill to: <input type="checkbox"/> Same <input type="checkbox"/> Different If Bill to is Different note instructions in Comments**	
Street: 2401 BREXWOOD RD SUITE 107		Third Party Billing requires written authorization from third party	
City: RAVEIGH	State/Province: NC	Zip/Postal Code:	Country:
Report To (Name): MICHAEL PENNY		Telephone #:	
Email Address: Michael.Penny@terracon.com		Fax #:	Purchase Order:
Project Name/Number: 70167296		Please Provide Results: <input type="checkbox"/> Fax <input type="checkbox"/> Email	
U.S. State Samples Taken: VA		CT Samples: <input type="checkbox"/> Commercial/Taxable <input type="checkbox"/> Residential/Tax Exempt	

Turnaround Time (TAT) Options* - Please Check

3 Hour 6 Hour 24 Hour 48 Hour 72 Hour 96 Hour 1 Week 2 Week

*For TEM Air 3 hr through 6 hr, please call ahead to schedule. *There is a premium charge for 3 Hour TEM AHERA or EPA Level II TAT. You will be asked to sign an authorization form for this service. Analysis completed in accordance with EMSL's Terms and Conditions located in the Analytical Price Guide.

PLM - Bulk (reporting limit)	TEM - Bulk
<input checked="" type="checkbox"/> PLM EPA 600/R-93/116 (<1%)	<input type="checkbox"/> TEM EPA NOB - EPA 600/R-93/116 Section 2.5.5.1
<input type="checkbox"/> PLM EPA NOB (<1%)	<input type="checkbox"/> NY ELAP Method 198.4 (TEM)
Point Count <input type="checkbox"/> 400 (<0.25%) <input type="checkbox"/> 1000 (<0.1%)	<input type="checkbox"/> Chatfield Protocol (semi-quantitative)
Point Count w/Gravimetric <input type="checkbox"/> 400 (<0.25%) <input type="checkbox"/> 1000 (<0.1%)	<input type="checkbox"/> TEM % by Mass - EPA 600/R-93/116 Section 2.5.5.2
<input type="checkbox"/> NIOSH 9002 (<1%)	<input type="checkbox"/> TEM Qualitative via Filtration Prep Technique
<input type="checkbox"/> NY ELAP Method 198.1 (friable in NY)	<input type="checkbox"/> TEM Qualitative via Drop Mount Prep Technique
<input type="checkbox"/> NY ELAP Method 198.6 NOB (non-friable-NY)	Other
<input type="checkbox"/> OSHA ID-191 Modified	<input type="checkbox"/>
<input type="checkbox"/> Standard Addition Method	

Check For Positive Stop - Clearly Identify Homogenous Group Date Sampled: **6/15/2016**

Samplers Name: **MICHAEL PENNY** Samplers Signature: *Michael Penny*

Sample #	HA #	DESCRIPTION Sample Location	LOCATION Material Description
HVA-1	1	PLASTER WITH BLACK FEET PAPER + GRAY PLASTER ON BLUE FOAM	WALL ADJACENT TO NEW BUILDING ON CMU
-2	1		↓
-3	1		
-4	1		
-5	1		
-6	1		
-7	1		
-8	1		
SEE NEXT PAGE			

PLM

Client Sample # (s): _____ Total # of Samples: **40**

Relinquished (Client): *Michael Penny* Date: **6/10/2016** Time: **9:25**

Received (Lab): _____ Date: **6/16/16** Time: **4:25 PM**

Comments/Special Instructions: _____ **6/16/16**



Terracon Consultants, Inc.
70167296

EM LAB
6/16/2016 13:0
PLM

TAT: 72 Hour
Bulk

Asbestos Bulk Building Material Chain of Custody

Order ID: 291603935
No Samples: 8
Due: 06/21 1:00 PM
Fax: 919-873-9555

Morrisville, NC 27560
PHONE: 919-465-3900
FAX: 919-465-3950

Additional Pages of the Chain of Custody are only necessary if

ation

QUALITATIVE

Sample #	HA #	Sample Location	Material Description
A1	1	NORTH CRAWL SPACE	SOIL/DEBRIS SOIL/DEBRIS
A2	1		
A3	1		
A4	1		
A5	1		
B2	1		
B3	1		
B4	1		
C1	1		
C2	1		
C3	1		
C4	1		
D1	1		
D2	1		
D3	1		
D4	1		
E1	2	SOUTH CRAWL SPACE	
E2	2		
E3	2		
E4	2		
F1	2		
F2	2		
F3	2		
F4	2		

*Comments/Special Instructions:

Terracon Consultants, Inc.

70167296
6/16/2016 13:0
PLM

TAT: 72 Hour
Bulk

Order ID: 291603935
No Samples: 8
Due: 06/21 1:00 PM
Fax: 919-873-9555

EMI
LABOR

PHONE:
FAX:

Additional Pages of the Chain of Custody are only necessary if needed for additional sample information

RECAPITULATE

Sample #	Sample Description	Volume/Area (Air) HA# (BUK)	Date/Time Sampled
G1	SOUTH CRAWL SPACE	SOIL/ DEBRIS	
G2	↓	↓	
G3			
G4			
H1			
H2			
H3			
H4			
*Comments/Special Instructions:			

APPENDIX D

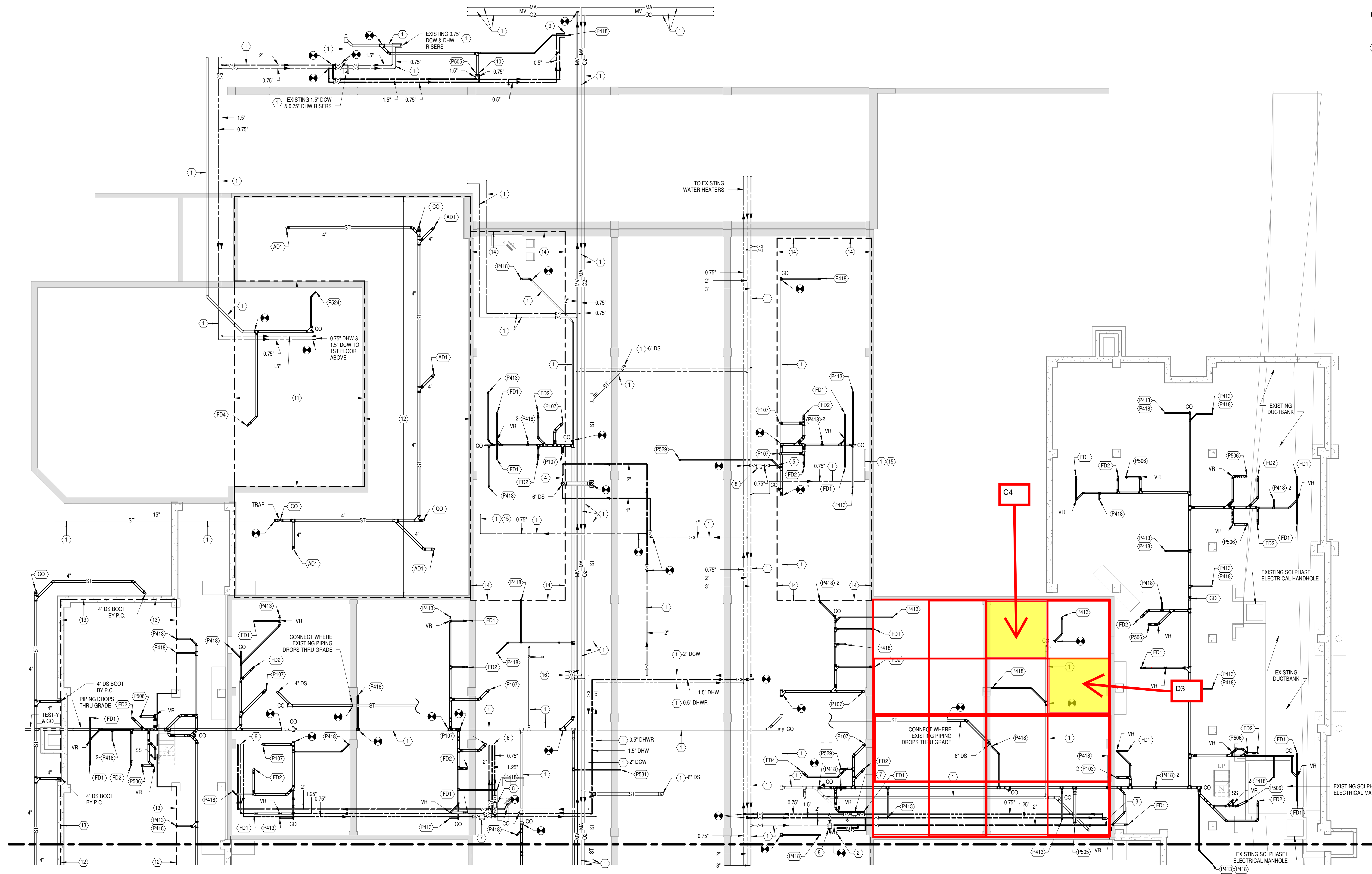
GENERAL CRAWL SPACE SAMPLE LOCATION DIAGRAM

GENERAL NOTE

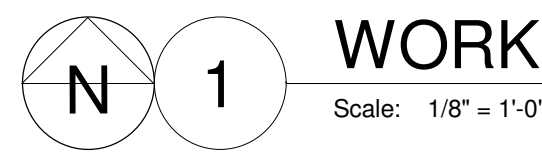
A. REFER TO SHEET 137-P001 FOR DRAWING INDEX, LEGEND AND NOTES.

NOTES:

- 1 EXISTING TO REMAIN.
- 2 EXTEND 2" DCW, 1" DHW & 0.75" DHWR SUPPLY RISERS UP TO ABOVE FIRST FLOOR CEILING TO SERVE NEW ADDITION AND RENOVATED AREA AS INDICATED ON SHEET 137-P103.
- 3 EXTEND 2" DCW, 1.25" DHW & 0.75" DHWR SUPPLY RISERS UP TO ABOVE FIRST FLOOR CEILING TO SERVE NEW ADDITION AND RENOVATED AREA AS INDICATED ON SHEET 137-P103.
- 4 EXTEND 2" DCW & 1" DHW SUPPLY RISERS UP TO ABOVE FIRST FLOOR CEILING TO SERVE NEW ADDITION AND RENOVATED AREA AS INDICATED ON SHEET 137-P103.
- 5 EXTEND 0.75" DHWR PIPING UP TO ABOVE FIRST FLOOR CEILING TO SERVE RENOVATED AREA AS INDICATED ON SHEET 137-P103.
- 6 EXTEND 2" DCW, 1.25" DHW & 0.75" DHWR SUPPLY RISERS UP TO ABOVE FIRST FLOOR CEILING TO SERVE NEW ADDITION AND RENOVATED AREA AS INDICATED ON SHEET 137-P103.
- 7 PROVIDE 0.5 GPM FLOW CONTROLLER ON DHWR WITH ISOLATION VALVES.
- 8 PROVIDE 0.25 GPM FLOW CONTROLLER ON DHWR WITH ISOLATION VALVES.
- 9 EXTEND 0.5" DCW & 0.5" DHWR SUPPLY RISERS UP TO FIRST FLOOR TO SERVE P418 FIXTURE AS INDICATED ON SHEET 137-P103.
- 10 EXTEND 1.5" DCW & 0.75" DHWR SUPPLY RISERS UP TO FIRST FLOOR TO SERVE P505 FIXTURE AS INDICATED ON SHEET 137-P103.
- 11 UNDER DEDUCT ALTERNATE 5 DELETE ALL WORK ASSOCIATED WITH RESIDENT WARMING KITCHEN.
- 12 UNDER DEDUCT ALTERNATE 4 ALL STORM SYSTEM WORK IN COURTYARD(S) SHALL REMAIN.
- 13 UNDER DEDUCT ALTERNATE 6 DELETE ALL WORK SHOWN IN THIS AREA. REFER TO DEDUCT ALTERNATE PLAN(S) ON SHEET 137-P801.
- 14 UNDER DEDUCT ALTERNATE 6 & 7 REVISE PLUMBING FIXTURE LAYOUT AS REQUIRED TO MATCH ARCHITECTURAL PLANS. REFER TO DEDUCT ALTERNATE PLAN(S) ON SHEET 137-P801.
- 15 EXISTING 0.75" DCW EXTENDING UP TO FIRST FLOOR ABOVE TO SERVE EXTERIOR WALL HYDRANT TO REMAIN.
- 16 EXISTING 0.75" MA & 0.75" O2 MEDICAL GAS RISERS EXTENDING UP TO SERVE FIRST FLOOR TO REMAIN. EXTEND NEW 1.5" MV PIPING UP TO ABOVE FIRST FLOOR CEILING TO SERVE FIRST FLOOR AS INDICATED ON SHEET 137-P105.



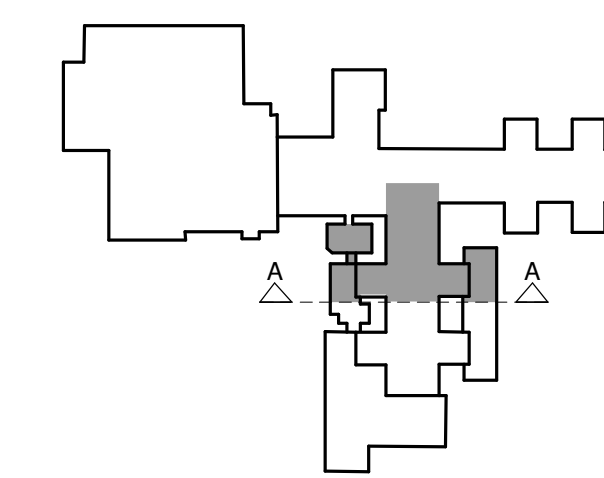
PARTIAL PIPE BASEMENT - AREA A - NEW WORK



Scale: 1/8" = 1'-0"

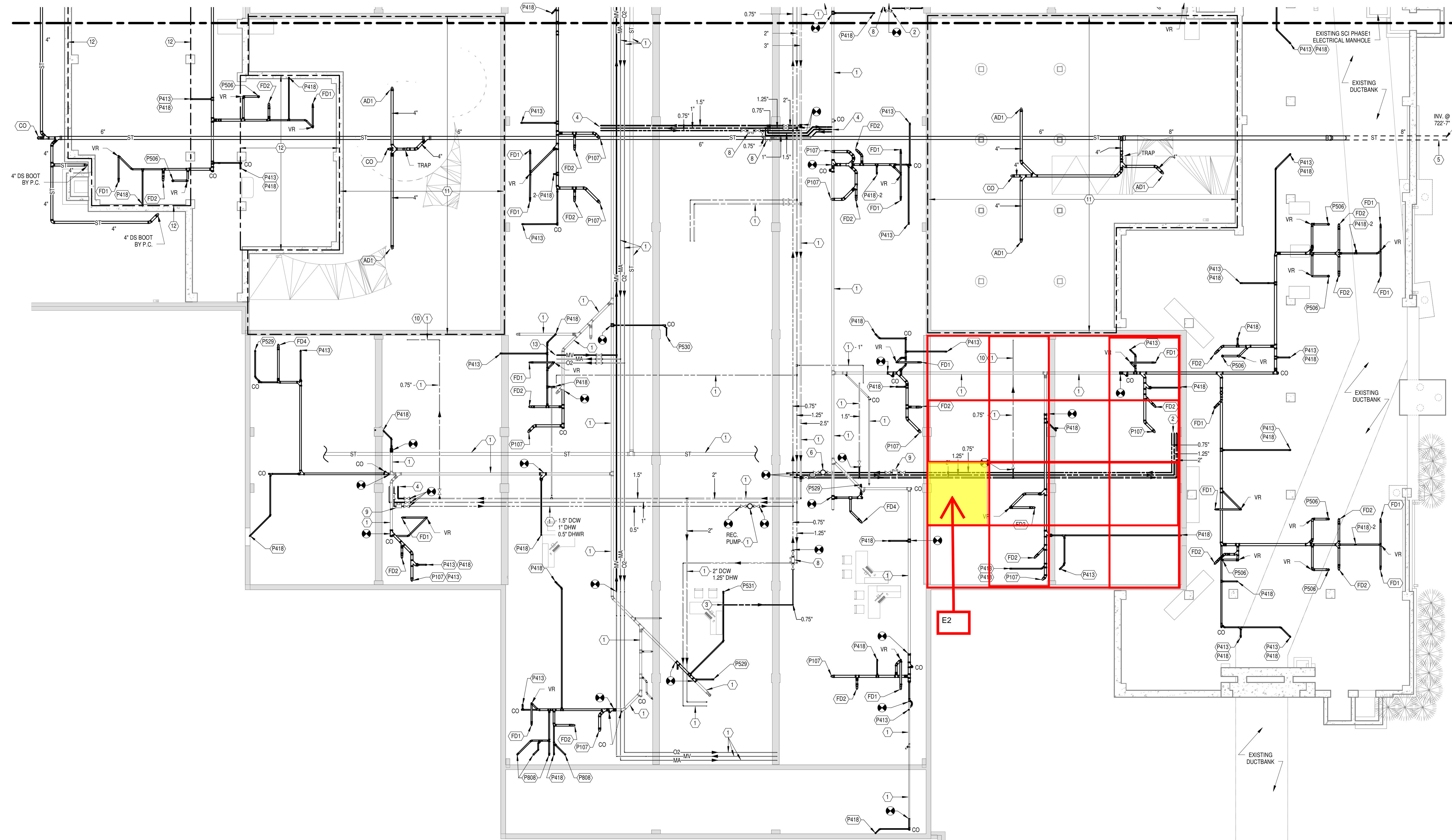
General sample location diagram

Highlighted area indicates area that reported asbestos in soil sample.
 Samples were analyzed utilizing qualitative PLM analysis.



KEYPLAN
Scale: N.T.S.

Revisions Date	CONSULTANTS: Heapy Engineering Mechanically Electrical Commissioning Technology Nationally Recognized Leader in Sustainability / LEED 1400 W Dorothy Lane, Dayton OH 45409-1310 Ph: 937-224-0861 Fax: 937-224-5777 www.heapy.com Heapy Project No.: 2011-04008	ARCHITECT/ENGINEERS: RDC/JOHN POE ARCHITECTS 524 FERNWOOD DRIVE ALTAMONTE SPRINGS, FLORIDA 32701 937 461 3290 PHONE 937 461 0260 FAX jpae@jrpoe.com	Drawing Title PARTIAL PIPE BASEMENT PLAN - AREA A - NEW WORK Approved: Project Director	Project Title Hampton VA, VAMC Renovate / Expand SCI, Phase II, 590-911 Building Number 137 Location Hampton, Va.	Date 09/14/2012 Project No. 590-911 RDC/UPA Project No. 11004.00 Drawing Number 137-P101 Dwg. 80 of 135	

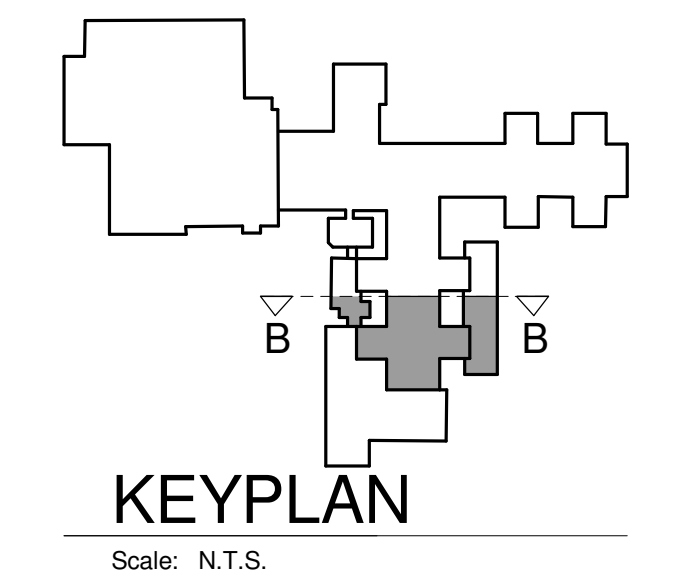


GENERAL NOTE
 A. REFER TO SHEET 137-P101 FOR DRAWING INDEX, LEGEND AND NOTES.

- NOTES:**
- EXISTING TO REMAIN.
 - EXTEND 2" DCW, 1.25" DHW & 0.75" DHWR SUPPLY RISERS UP TO ABOVE FIRST FLOOR CEILING TO SERVE RENOVATED AREA AND NEW ADDITION AS INDICATED ON SHEET 137-P104.
 - NEW 0.75" DHWR FROM FIRST FLOOR ABOVE. PIPING CONTINUED ON SHEET 137-P104.
 - EXTEND NEW 1.5" DCW, 1" DHW & 0.75" DHWR SUPPLY RISERS UP TO ABOVE FIRST FLOOR CEILING TO SERVE RENOVATED AREA AS INDICATED ON SHEET 137-P104.
 - P.C. SHALL EXTEND 8" STORM PIPING 5'-0" FROM BUILDING EXTERIOR WALL AND STUB FOR EXTENSION BY S.U.C.
 - RE-INSTALL EXISTING RE-CIRCULATION PUMP IN NEW 0.75" RE-CIRCULATION LINE.
 - PROVIDE 0.5 GPM FLOW CONTROLLER ON DHWR WITH ISOLATION VALVES.
 - PROVIDE 0.25 GPM FLOW CONTROLLER ON DHWR WITH ISOLATION VALVES.
 - PROVIDE COMBINATION BALANCING/SHUT-OFF VALVE. SET UNIT TO MAINTAIN FLOW OF 0.5 GPM.
 - EXISTING 0.75" DCW EXTENDING UP TO FIRST FLOOR ABOVE TO SERVE EXISTING EXTERIOR WALL HYDRANT TO REMAIN.
 - UNDER DEDUCT ALTERNATE 4 ALL STORM SYSTEM WORK IN COURTYARD(S) SHALL REMAIN.
 - UNDER DEDUCT ALTERNATE 6 & 7 DELETE ALL WORK IN THIS AREA. REFER TO DEDUCT ALTERNATE PLANS ON SHEET 137-P101.
 - EXISTING 0.75" MA & 0.75" CO MEDICAL GAS RISERS EXTENDING UP TO SERVE SERVE FLOOR TO REMAIN. EXTEND NEW 1.5" MV PIPING UP TO ABOVE FIRST FLOOR CEILING TO SERVE FIRST FLOOR AS INDICATED ON SHEET 137-P106.

PARTIAL PIPE BASEMENT PLAN - AREA B - NEW WORK
 Scale: 1/8" = 1'-0"

General sample location diagram
 Highlighted area indicates area that reported asbestos in soil sample.
 Samples were analyzed utilizing qualitative PLM analysis.



three inches = one foot
 one and one-half inches = one foot
 one inch = one foot
 three-quarters inch = one foot
 one-half inch = one foot
 three-eighths inch = one foot
 one-quarter inch = one foot
 one-eighth inch = one foot

Revisions Date	CONSULTANTS: Heapy Engineering Mechanical Electrical Commissioning Technology Nationally Recognized Leader in Sustainability / LEED 1400 W Dorothy Lane, Dayton OH 45409-1310 Ph: 937-224-0861 Fax: 937-224-5777 www.heapy.com Heapy Project No.: 2011-04008	ARCHITECT/ENGINEERS: RDC/JOHN POE ARCHITECTS 524 FERNWOOD DRIVE ALTAMONTE SPRINGS, FLORIDA 32701 937 461 3290 PHONE 937 461 0260 FAX jpae@rdcpoe.com	Drawing Title PARTIAL PIPE BASEMENT PLAN - AREA B - NEW WORK Approved: Project Director	Project Title Hampton VA, VAMC Renovate / Expand SCI, Phase II, 590-911	Date 09/14/2012
	Building Number 137	Checked RLT	Drawn DPB	Drawing Number 137-P102	Location Hampton, Va.

